CLEMSON COOPERATIVE EXTENSION

Entomology
Insect Information Series

Providing Leadership in Environmental Entomology
Department of Entomology, Soils, and Plant Sciences ● 114 Long Hall ● Clemson, SC 29634-0315 ● Phone: 864-656-3111
email:dpento@clemson.edu

Carpenter Ants

Many kinds of ants can become pests in and around a home or structure. One of the most common is the carpenter ant. Carpenter ants belong to the largest of all ant groups. Although carpenter ants are usually more of a problem in the Northwest and Northeast, they can be both a nuisance and a serious structural pest across the southeastern United States.

Carpenter ants play an important role in the forest ecosystem. They are responsible for excavating and breaking down wood. It is this behavior that gives them their common name. They do not eat wood like termites, but tunnel into wood to make a nest. One sign that carpenter ants are present is a pile of wood shavings outside a hole or opening. The wood shavings will be coarse and there will be insect parts mixed among them. The ants form a network of galleries in the wood, often across the grain, where they live. The colony is protected, inside in the wood.

Biology. A carpenter ant colony is started by a single queen. The nest does not have to be in wood. It can be in the soil or under rocks. The queen's first set of eggs hatch into small workers called minims. These small workers feed the queen and as more eggs are produced, the young grow into larger workers, called majors. These larger workers can be from 1/4 to 5/8 inch in length. When the colony is six to ten years old, and contains more than 2,000 workers, it will branch out to form satellite colonies. Satellite colonies can be in the same tree or in a nearby tree or structure. They will have all of the common life stages, with the exception of eggs and a queen.

An older, established colony will produce winged males and females that will fly out to begin new colonies. These are called alates. This is the same term used to described termites with wings. The alate females can be quite large, measuring up to 3/4 inch, while the males are generally less than ½ inch. This usually occurs in the late spring or early summer.

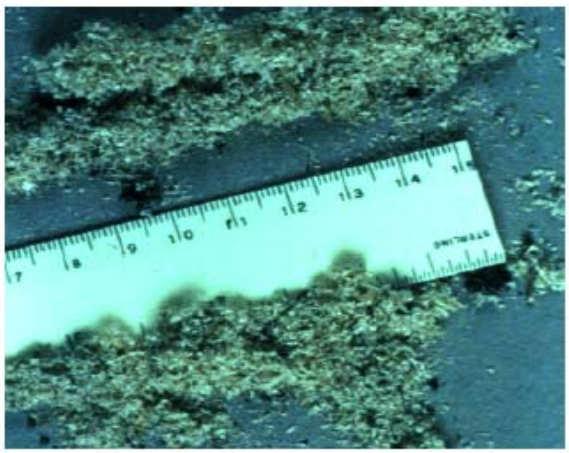
Non-Chemical Control. If you have a problem with carpenter ants coming into your house, they are most likely coming from the outside. The most important thing to remember is that they are primarily attracted to moist wood. Any possible sources of excess moisture found within a structure needs to be fixed. Another way to minimize the problem is to remove any vegetation, such as tree limbs, that are close to or touching the house. Ants also can enter houses along utility lines. Properly sealed points of entry will eliminate this mode of access. Any other cracks or crevices in the structure are possible entry points, and should be sealed.

The key to controlling carpenter ants is locating the main nest and as many of the satellite nests as possible. The main nest may be hard to find for several reasons. First, carpenter ants are active at night. Second, carpenter ants can travel long distances for food. The best way to find the main nest is to observe carpenter ants at night when they move away from the colony to find food. They will eventually go back to the colony. If you provide food for the workers, like honey, you will be able to follow them back to their nest after they feed.

Satellite colonies can be found in the same way, and may be located in many places. Some may be difficult to find such as in hollow porch columns, above or below windows, in window boxes, in hollow core doors, in wall and ceiling voids, under bathtubs, showers or hot tubs, and in types of insulation, and many other

Large Carpenter Ant Worker

locations. In some situations, the infested material can be removed to control the ants.



Carpenter ant wood shavings and insect parts kicked out of the colony.

Chemical Control. There are many ways to control carpenter ant infestations using insecticides. One thing to remember is that the earlier a carpenter ant problem is handled, the less insecticide will be needed to control it. The treatment method will depend on where the ants are located. If ants are living in solid wood or walls, one treatment is to drill small holes in the wood directly into the ant galleries. Then inject a dust or aerosol insecticide. If ants are coming into a structure from the outside and the nest cannot be found, an outside perimeter treatment with an insecticide spray may provide some control. Carpenter ant colonies located in the soil, can be drenched with a water-based insecticide or simply removed.

There are a few bait products available to control carpenter ants. In some cases, baits appear to work very well and in others, the baits are not very effective. One problem may be that carpenter ants change their food preference with the seasons. They are more attracted to proteins in spring and more attracted to sweets in the winter. The same bait may not be attractive to the ants at all times of the year. If you decide to give the baits a try, bait placement is very important. Watch the trails the ants follow, then place the bait along their paths.

Carpenter ant control can be very difficult for an untrained person. You may want to hire a qualified pest control operator to handle the job for you. If you do, request quotes from two or three companies. Select the company that guarantees they will solve the problem, rather than the one that gives the lowest bid.

For other publications in our Entomology Insect Information Series visit our web site at http://www.clemson.edu/esps.

Prepared by Jonathan M. Sargent, Graduate Extension Assistant, Patricia A. Zungoli, Extension Entomologist/Professor, and Eric P. Benson, Extension Entomologist/Associate Professor, Department of Entomology, Soils, and Plant Sciences, Clemson University.

EIIS/HS-9 (New 10/1998).